

# EPA to Evaluate Radiation in Soils at Former Watch Company Location

**Silbert Watch Company Investigation**  
Elgin, Illinois

June 2022

## For more information

For questions, comments or more information about the evaluation, contact one of these EPA team members.

*For general questions:*

### **Heriberto León**

Community Involvement  
Coordinator  
Superfund Division  
312-886-6163

[leon.heriberto@epa.gov](mailto:leon.heriberto@epa.gov)

*For technical questions:*

### **James Mitchell**

On-scene Coordinator  
Superfund Division  
312-353-9537

[mitchell.james@epa.gov](mailto:mitchell.james@epa.gov)

### **Kelly Horn,**

Chief, Radiation Protection Services  
Division of Nuclear Safety  
Illinois Emergency Management  
Agency  
217-558-5135

[Kelly.Horn@illinois.gov](mailto:Kelly.Horn@illinois.gov)

You may call EPA toll-free at  
800-621-8431,  
8:00 a.m. – 4:30 p.m., weekdays

### **Website:**

[response.epa.gov/silbert\\_watch\\_co](https://response.epa.gov/silbert_watch_co)

U.S. Environmental Protection Agency is conducting an evaluation of radium contaminated soils in an area that includes two parcels located on the northwest corner of Dundee and Stewart avenues in Elgin, Illinois. This will help the EPA determine if there are any potential concerns about human health and the environment in the area that require further action from the agency. EPA's evaluation is in response to a request from the Illinois Emergency Management Agency for assistance with the site.

## Background

Located at 1409 Dundee Avenue from 1954 to 1971, the Silbert Watch Company used radium-based paint on watch dials and hands. After Silbert Watch shut down operations, the building located on the property was used by a mattress store, until fire destroyed the structure. Based on EPA's historical imagery reviews, the building was demolished between 1994 and 1999. The neighboring parcel located at 670 Stewart Avenue had a single-family residential structure, which also appears to have been demolished around the same time.



The dotted black lines indicate the locations of the former Silbert Watch Company building and the residential property.

### What activities can be expected?

EPA completed a geophysical investigation to search for the presence of old structures including basements. Results of this investigation will guide a soil boring investigation to determine if radium contamination is present at concentrations that would require a further agency action. The soil boring investigation will use a GeoProbe to drill into the ground ranging from 5-10 feet below the ground surface. Radiation detectors will be lowered into these holes to look for contamination at depth.



*Photo of GeoProbe equipment typically used by EPA to evaluate radiation in soil.*

### What is radium?

Radium is a naturally occurring radioactive metal that is formed when uranium and thorium decay in the environment. In the natural environment, radium is found at low levels in soil, water, rocks, coal, plants, and food. In the early 1900s, radium was widely used in many industries such as the medical field where it was used for therapeutic health applications including cancer treatments. Radium was also used to make luminous paints for watch dials, clocks, glow in the dark buttons, and military instruments, particularly during World War II. The use of radium for these purposes was discontinued in 1970s because of the health hazards from these types of exposures.

### How can radium affect people's health?

Exposure to radium over a long period may result in many different harmful effects. If inhaled as dust or ingested as a contaminant, risk is increased for several diseases, including lymphoma, bone cancer, and hematopoietic (blood-formation) diseases, such as leukemia and aplastic anemia. These effects take years to develop. If exposed externally to radium's gamma radiation, risk of cancer is increased in essentially all tissues and organs, though to varying degrees. However, in the environment, the greatest risk associated with radium is actually posed by its direct decay product radon. Radon has been shown to cause lung cancer.

**More information:** [www.epa.gov/radiation](http://www.epa.gov/radiation).

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## SILBERT WATCH COMPANY INVESTIGATION: EPA to Evaluate Radiation in Soils at Former Watch Company Location

United States  
Environmental Protection  
Agency  
Region 5  
Community Involvement and  
Outreach Section (RE-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590

